**STATEMENT OF BASIS**

Sessions Company, Inc.
Enterprise, AL
Coffee County
602-0004

This proposed Renewal Title V Major Source Operating Permit is issued under the provisions of ADEM Admin. Code R. 335-3-16. The above named applicant has requested authorization to perform the work or operate the facility shown on the application and drawings, plans, and other documents attached hereto or on file with the Air Division of the Alabama Department of Environmental Management, in accordance with the terms and conditions of this permit.

Sessions Company was issued its existing Major Source Operating Permit (MSOP) on September 7, 2007 with an expiration date of January 24, 2010. Per ADEM Rule 335-3-16-.12(2), an application for permit renewal shall be submitted at least six (6) months, but not more than eighteen (18) months, before the date of expiration of the permit. Based on this rule, the application for renewal was due to the Department no later than July 24, 2009, but no earlier than July 24, 2008. An application for permit renewal was received by the Department on July 23, 2009. No additional information was deemed necessary for processing of this MSOP. The proposed MSOP will expire in January 24, 2015.

The following are significant sources of air pollution for this facility:

| **Emissions ID (Permit No.)** | **Descriptions** |
|---|---|
| | *Old Shelling Plant* |
| 001A (Z010): | Receiving for Warehouses 4, 8, and 27 |
| 002 (Z036): | 24 TPH Farmer's Stock Cleaner with Baghouse Common to Z037 |
| 003 (Z037): | 24 TPH Old Shelling Plant with Baghouse Common to Z036<br>• Primary Sheller (Z037A)<br>• Meat Reclaimer (Z037E) |
| | *New Shelling Plant* |
| 001B (Z011): | Receiving System for Warehouses 28 and 29 |
| 001D (X044): | Peanut Loading System at Warehouses 28, 29, and 30 |
| 001E (X045): | Receiving System for Warehouses 30 and 31 |
| 005 (X042): | 30 TPH Farmer's Stock Cleaner with Four (4) Cyclones (controlled)<br>• Primary Cleaner I (X042A&B)<br>• Secondary Cleaner I (X042C)<br>• Pop Fan (X042D) |
| 006A (X040): | 24 TPH New Peanut Shelling Plant with Twenty-One (21) Cyclones (controlled)<br>• Shelling Units 1-4 (SU1, SU2, SU3, and SU4)<br>• One Split Separator<br>• LSK Separator<br>• Two Meat Reclaimers (MR1 and MR2) |
| 006B (Z032): | 4.5 Hull Bin and Truck Loadout System (New Shelling Plant) (uncontrolled) |

| | |
|---|---|
| 007 (X041): | 12 TPH Farmer's Stock Peanut Seed Cleaner with Three (3) Cyclones (controlled) |

*Oil Mill*

| | |
|---|---|
| 001C (Z018): | Peanut Receiving System |
| 008 (X039): | 25.1 MMBtu/hr Natural Gas/LPG Fired Cleaver Brooks Boiler (Oil Mill) |
| 009 (X043): | Peanut Oil Extraction Process with 20,000 gallon Hexane Solvent Storage Tank and Mineral Oil Absorption System (controlled) |
| 010 (X038): | 20 TPH Hopper Car Meal Loadout with Hood and Cyclone and Totally Enclosed Truck Meal Loadout (Oil Mill) (controlled) |

**Renewal Notes**

1. Emissions points changes to correspond with the facility's identification
2. Removal of the vacated 40 CFR 63, Subpart DDDDD "*National Emissions Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters*"

**Peanut Receiving System**:

Peanut Receiving System is comprised of the following emissions points:

| Emission Point | Description |
|---|---|
| 001A | Receiving for Warehouses 4, 8, and 27 (Old Shelling Plant) |
| 001B | Receiving System for Warehouses 28 and 29 (New Shelling Plant) |
| 001C | Peanut Receiving System (Oil Mill) |
| 001D | Peanut Loading System at Warehouses 28, 29, and 30 (New Shelling Plant) |
| 001E | Receiving System for Warehouses 30 and 31 (New Shelling Plant) |

Applicability:

- This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, "*Major Source Operating Permits*".
- This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-4-.02, "*Fugitive Dust and Fugitive Emissions*".

Emissions Standards:

- There are no unit specific emissions standards for this unit.

Compliance and Performance Test Methods and Procedures:

- There are no unit specific compliance and performance test methods and procedures for this unit.

Emission Monitoring:

- There are no unit specific emissions monitoring requirements for this unit.

Recordkeeping and Reporting Requirements:

- There are no unit specific recordkeeping and reporting requirements for this unit.

Emissions:

Per air permit application forms submitted, the emissions from this unit are as follows:

| Emission Point | Pollutant | Potential Emissions | |
|---|---|---|---|
| | | (lb/hr) | (TPY) |
| 001A | PM - FUG | 3.30 | 14.5 |
| 001B | PM - FUG | 3.30 | 14.5 |
| 001C | PM - FUG | 0.16 | 0.71 |
| 001D | PM - FUG | 14.9 | 65.3 |
| 001E | PM - FUG | 3.30 | 14.5 |

**24 TPH Farmer's Stock Cleaner**:

The Farmer's Stock Cleaner is currently comprised of the following emission point:

| Emission Point | Description |
|---|---|
| 002 | 24 TPH Farmer's Stock Cleaner with Baghouse common to Z037 |

Applicability:

- This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, "*Major Source Operating Permits*".
- This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-4-.01(1), "*Visible Emissions*".
- The source permitted under this unit has enforceable limits in place in order to prevent it from being subject to the provisions of ADEM Admin. Code R. 335-3-14-.04, "*Air Permits Authorizing Construction in Clean Air Areas [Prevention of Significant Deterioration]*.
- This source is not subject to the applicable requirements of 40 CFR 64, "*Compliance Assurance Monitoring*". However, the control device use to control emissions from this unit also controls emissions from unit Z037, Old Shelling Plant, which is subject to CAM. The CAM monitoring associated with Z037 will be applied to this unit.

Emissions Standards:

- Opacity

  ***Chapter 4 Section .01*** states that no person shall discharge into the atmosphere from any source of emission, particulate of an opacity greater than that designated as twenty (20%) percent opacity, as determined by a six (6) minute average. During one six (6) minute period in any sixty (60) minute period, a person may discharge into the atmosphere from any source of emission, particulate of an opacity not greater than that designated as forty percent (40%) opacity ***(ADEM Admin Code R. 335-4-.01(1)(a)(b))***.

- Particulate

  This unit has the following enforceable limits in place to prevent it from being subject to the applicable provisions of ***ADEM Admin. Code R. 335-3-14-.04***:

  1. This process shall not operate more than 4,000 hours during any consecutive twelve (12) month period.

  2. Emissions from this unit are limited to no more than 2.28 lb/hr (4.56 TPY). The limit was derived was derived using the following equation:

*PM Emissions (TPY) = Maximum Feed Rate[1] (TPH) * Emission Factor[2] (lb/ton) * (1 – Baghouse Control Efficiency)[3] * Allowable Operating Schedule[4] (hr/yr) * Safety Factor[5]*

*[1] Maximum feed rate for this unit is 24 TPH*
*[2] AP-42 Section 9.10.2-1, Table 9.10.2.1-1 factor of 1.90 for almond processing (since peanut processing numbers are unavailable).*
*[3] Ninety-nine (99%) percent baghouse control efficiency used*
*[4] Allowable 12-month total of 4,000 hr/yr*

[5] *Safety Factor of 5 used*

Compliance and Performance Test Methods and Procedures:

- If testing is required, particulate emissions from this process shall be measured in accordance with 40 CFR Part 60, Appendix A, Method 5.
- If testing is required, visible emissions from this process shall be measured in accordance with 40 CFR Part 60, Appendix A, Method 9.

Emission Monitoring:

The following 40 CFR 64 Compliance Assurance Monitoring requirements apply to the baghouse associated with this unit:

- A properly maintained and operated device shall be utilized to measure the pressure differential across the baghouse. The device shall be located at eye level and be easily accessible for inspections by Air Division and plant personnel.
- The emissions from the baghouse shall be visually observed a minimum of once per day to determine if visible emissions are present.
- The facility shall inspect and clean the baghouse no less frequently than annually and whenever the observed visible emissions are greater than normal.
- Corrective action must be taken within four (4) hours when visible emissions are observed. Maintenance shall be performed as needed.
- Pressure drop across the baghouse shall be monitored and recorded daily while the unit is operating.
- A pressure drop excursion shall be defined as a pressure drop less than one (1) inch of water and greater than eight (8) inches of water.
- When a pressure drop excursion occurs, corrective action shall be taken within four (4) hours to identify and correct the problem.

Recordkeeping and Reporting Requirements:

- Records of the date, time, and observed opacity of the daily visible emissions observations, inspections, corrective actions taken, and maintenance of this source shall be recorded in a logbook. These records shall be retained for a minimum of five (5) years and made available upon request.
- The date, time, and daily baghouse pressure drop observations, for this source shall be recorded in a logbook. These records shall be retained for a minimum of five (5) years and made available upon request.
- Records of the process operating hours, including monthly and twelve (12) month rolling totals, shall be kept in a permanent form suitable for inspection. These records shall be retained for a minimum of five (5) years and made available upon request.
- A semi-annual report shall be submitted to the Air Division within 60 days of the end of the six (6) month reporting period. This report shall contain the following
    1. All visible emissions excursions to include the date, time, cause of the visible emissions excursion, and the corrective action taken.
    2. All pressure drop excursions to include time, date, observed pressure drop, cause of the pressure drop excursions, and the corrective action taken.
    3. A statement certifying that the inspections were accomplished as required.

Emissions:

The current emissions from this unit are as follows:

| Emission Point | Pollutant | Allowable Emissions[1] | | Uncontrolled Potential Emissions[2] | | Controlled Potential Emissions[3] | | Expected Emissions[4] | |
|---|---|---|---|---|---|---|---|---|---|
| | | (lb/hr) | (TPY) | (lb/hr) | (TPY) | (lb/hr) | (TPY) | (lb/hr) | (TPY) |
| 002 | PM | 2.28 | 4.56 | 45.6 | 91.2 | 0.46 | 0.91 | 0.46 | 0.57 |

[1] – *Allowable emissions based on permitted limit (at 4,000 hr/yr) to avoid ADEM Admin. Code R. 335-3-14-.04.*
[2] – *Uncontrolled potential emissions are equal to emission factor of 1.90 lb/ton(AP-42 Table 9.10.2.1-1) multiplied by the proposed increased process rate of 24 TPH and 4,000 hours operation/year.*
[3] – *Controlled emissions are the product of uncontrolled emissions and (1-99% baghouse efficiency).*
[4] – *Expected emissions based on historical data of 2,484 hrs/yr multiplied by controlled lb/hr factor.*

**Old Shelling Plant**:

The Old Shelling Plant is comprised of the following emissions points:

| Emission Point | Description |
|---|---|
| 003 | 24 TPH Old Shelling Plant with Baghouse common to Z036 |

Applicability:

- This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, "*Major Source Operating Permits*".
- This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-4-.01(1), "*Visible Emissions*".
- The source permitted under this unit has enforceable limits in place in order to prevent it from being subject to the provisions of ADEM Admin. Code R. 335-3-14-.04, "*Air Permits Authorizing Construction in Clean Air Areas [Prevention of Significant Deterioration]*.
- This source is subject to the applicable requirements of 40 CFR 64, "*Compliance Assurance Monitoring*".

Emissions Standards:

- Opacity

  ***Chapter 4 Section .01*** states that no person shall discharge into the atmosphere from any source of emission, particulate of an opacity greater than that designated as twenty (20%) percent opacity, as determined by a six (6) minute average. During one six (6) minute period in any sixty (60) minute period, a person may discharge into the atmosphere from any source of emission, particulate of an opacity not greater than that designated as forty percent (40%) opacity ***(ADEM Admin Code R. 335-4-.01(1)(a)(b))***.

- Particulate

  This unit has the following enforceable limits in place to prevent it from being subject to the provisions of ***ADEM Admin. Code R. 335-3-14-.04***:

  1. This process shall not operate more than 4,000 hours during any consecutive twelve (12) month period.

  2. Emissions from this unit are limited to no more than 5.88 lb/hr (11.8) TPY. The limit was derived was derived using the following equation:

  *PM Emissions (TPY) = Maximum Feed Rate[1] (TPH) * Emission Factor[2] (lb/ton) * (1 – Baghouse Control Efficiency)[3] * Allowable Operating Schedule[4] (hr/yr) * Safety Factor[5]*

  *[1] Maximum feed rate for this unit is 24 TPH*
  *[2] AP-42 Section 9.10.2-1, Table 9.10.2.1-1 factor of 4.90lbton (aggregate AP-42 factor derived from several types of equipment on Table 9.10.2.1-1)*
  *[3] Ninety-nine (99%) percent baghouse control efficiency used*
  *[4] Allowable 12-month total of 4,000 hr/yr*
  *[5] Safety Factor of 5 used*

Compliance and Performance Test Methods and Procedures:

- If testing is required, particulate emissions from this process shall be measured in accordance with 40 CFR Part 60, Appendix A, Method 5.
- If testing is required, visible emissions from this process shall be measured in accordance with 40 CFR Part 60, Appendix A, Method 9.

Emission Monitoring:

The following 40 CFR 64 Compliance Assurance Monitoring requirements are for this unit:

- A properly maintained and operated device shall be utilized to measure the pressure differential across the baghouse. The device shall be located at eye level and be easily accessible for inspections by Air Division and plant personnel.
- The emissions from the baghouse shall be visually observed a minimum of once per day to determine if visible emissions are present.
- The facility shall inspect and clean the baghouse no less frequently than annually and whenever the observed visible emissions are greater than normal.
- Corrective action must be taken within four (4) hours when visible emissions are observed. Maintenance shall be performed as needed.
- Pressure drop across the baghouse shall be monitored and recorded daily while the unit is operating.
- A pressure drop excursion shall be defined as a pressure drop less than one (1) inch of water and greater than eight (8) inches of water.
- When a pressure drop excursion occurs, corrective action shall be taken within four (4) hours to identify and correct the problem.

Recordkeeping and Reporting Requirements:

- Records of the date, time, and observed opacity of the daily visible emissions observations, inspections, corrective actions taken, and maintenance of this source shall be recorded in a logbook. These records shall be retained for a minimum of five (5) years and made available upon request.
- The date, time, and daily baghouse pressure drop observations, for this source shall be recorded in a logbook. These records shall be retained for a minimum of five (5) years and made available upon request.
- Records of the process operating hours, including monthly and twelve (12) month rolling totals, shall be kept in a permanent form suitable for inspection. These records shall be retained for a minimum of five (5) years and made available upon request.
- A semi-annual report shall be submitted to the Air Division within 60 days of the end of the six (6) month reporting period. This report shall contain the following
    1. All visible emissions excursions to include the date, time, cause of the visible emissions excursion, and the corrective action taken.
    2. All pressure drop excursions to include time, date, observed pressure drop, cause of the pressure drop excursions, and the corrective action taken.
    3. A statement certifying that the inspections were accomplished as required.

Emissions:

| **Emission Point** | **Pollutant** | **Allowable Emissions[1]** | | **Uncontrolled Potential Emissions[2]** | | **Controlled Potential Emissions[2]** | | **Expected Emissions[4]** | |
|---|---|---|---|---|---|---|---|---|---|
| | | **(lb/hr)** | **(TPY)** | **(lb/hr)** | **(TPY)** | **(lb/hr)** | **(TPY)** | **(lb/hr)** | **(TPY)** |
| 003 | PM | 5.88 | 11.6 | 118 | 236 | 1.18 | 2.36 | 1.18 | 1.46 |

[1] *– Allowable emissions based on permitted limit (at 4,000 hr/yr) to avoid ADEM Admin. Code R. 335-3-14-.04.*

[2] *– Uncontrolled potential emissions are equal to emission factor of 4.90 lb/ton (which is a derived aggregate factor from several types of equipment factors in AP-42 Table 9.10.2.1-1) multiplied by proposed process rate of 24 TPH and 4,000 hours operation/year.*

[3] *– Controlled emissions are the product of uncontrolled emissions and (1-99% baghouse efficiency).*

[4] *– Expected emissions based on historical data of 2,473 hrs/yr multiplied by controlled lb/hr factor.*

**30 TPH Farmer's Stock Cleaner:**

The 30 TPH Farmer's Stock Cleaner is comprised of the following emissions points:

| Emission Point | Description |
|---|---|
| 005 | 30 TPH Farmer's Stock Cleaner with Four (4) Cyclones |

Applicability:

- This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, "*Major Source Operating Permits*".
- This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-4-.01(1), "*Visible Emissions*".
- This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-4-.04, "*Control of Particulate Emissions in Process Industries – General*".
- The source permitted under this unit has enforceable limits in place in order to prevent it from being subject to the provisions of ADEM Admin. Code R. 335-3-14-.04, "*Air Permits Authorizing Construction in Clean Air Areas [Prevention of Significant Deterioration]*.
- This source is not subject to the applicable requirements of 40 CFR 64, "*Compliance Assurance Monitoring*". The cyclones used in this process exist for product recovery and separation and are essential to the process.

Emissions Standards:

- Opacity

  ***Chapter 4 Section .01*** states that no person shall discharge into the atmosphere from any source of emission, particulate of an opacity greater than that designated as twenty (20%) percent opacity, as determined by a six (6) minute average. During one six (6) minute period in any sixty (60) minute period, a person may discharge into the atmosphere from any source of emission, particulate of an opacity not greater than that designated as forty percent (40%) opacity ***(ADEM Admin Code R. 335-4-.01(1)(a)(b))***.

- Particulate

  This unit has the following enforceable limits in place to prevent it from being subject to the provisions of ***ADEM Admin. Code R. 335-3-14-.04***:

  1. This process shall not operate more than 4,380 hours during any consecutive twelve (12) month period.

  ***Chapter 4 Section .04*** limits particulate matter emissions from this source to no more than 29.83 lbs/hr. This is calculated using the process weight equation for Class I counties, $E = 17.31P^{0.16}$. ***(ADEM Admin Code R. 335-4-.04(1))***. When operating at full capacity for the requested number of number of hours (4,380 hr/yr), then the allowable PM emissions would be 65.3 TPY.

Compliance and Performance Test Methods and Procedures:

- If testing is required, particulate emissions from this process shall be measured in accordance with 40 CFR Part 60, Appendix A, Method 5.
- If testing is required, visible emissions from this process shall be measured in accordance with 40 CFR Part 60, Appendix A, Method 9.

Emission Monitoring:

- When operating, the emissions from the cyclones shall be visually observed a minimum of once daily to determine if observed visible emissions are greater than normal as determined by previous observations.
- Sessions shall conduct an inspection of the cyclones no less frequently than annually, but more often whenever visible emissions are observed.
- Whenever greater than normal visible emissions are observed, corrective action shall be taken within four (4) hours, followed by an additional observation to confirm that greater than normal visible emissions are no longer present.

Recordkeeping and Reporting Requirements:

- Records of process operating hours, including monthly totals, should be kept in a permanent form suitable for inspection. The records shall be retained for at least five (5) years from the date of generation.
- Records of the process operating hours, including monthly and twelve (12) month rolling totals, shall be kept in a permanent form suitable for inspection. These records shall be retained for a minimum of five (5) years and made available upon request.
- A semi-annual report shall be submitted to the Air Division within 60 days of the end of the six (6) month reporting period. This report shall contain the following:
  1. A statement certifying that the inspections were performed as required.
  2. Date and time any greater than normal visible emissions were observed.
  3. Records of any corrective action, maintenance, or inspections performed.

Emissions:

Per air permit application forms submitted, the proposed emissions from this unit would be:

| **Emission Point** | **Pollutant** | **Allowable Emissions[1]** | | **Uncontrolled Potential Emissions[2]** | | **Controlled Potential Emissions[2]** | | **Expected Emissions[4]** | |
|---|---|---|---|---|---|---|---|---|---|
| | | **(lb/hr)** | **(TPY)** | **(lb/hr)** | **(TPY)** | **(lb/hr)** | **(TPY)** | **(lb/hr)** | **(TPY)** |
| 005 | PM | 29.8 | 65.3 | 134 | 293 | 13.4 | 29.3 | 13.4 | 16.3 |

*[1] – Allowable hourly emissions based on process weight equation for Class I counties, $E = 17.31P^{0.16}$ (ADEM Admin Code R. 335-4-.04(1)). Yearly is allowable hourly multiplied by the requested reduced allowable hours of operation (4,380 hrs/yr).*

*[2] – Uncontrolled hourly potential emissions are calculated by dividing the total emissions from all four cyclones obtained from a stack test (13.4 lb/hr) by (1-cyclone efficiency of 90%). Yearly uncontrolled potential is equal to the hourly multiplied by the requested reduced hourly operation limit of 4,380 hours/yr.*

*[3] – Controlled hourly emissions are the result of a stack test. Yearly controlled potential emissions is equal to the hourly multiplied by the hourly operation limit of 4,380 hours/yr.*

*[4] – Expected emissions based on historical data of 2,435 hrs/yr multiplied by emission factor obtained from stack test data.*

**New Peanut Shelling Plant:**

The New Peanut Shelling Plant is comprised of the following emissions points:

| Emission Point | Description |
|---|---|
| 006A | 24 TPH New Peanut Shelling Plant with Twenty-One (21) Cyclones |
| 006B | 4.5 Hull Bin and Truck Loadout System (New Shelling Plant) |

Applicability:

- This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, "*Major Source Operating Permits*".
- This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-4-.01(1), "*Visible Emissions*".
- This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-4-.02, "*Fugitive Dust and Fugitive Emissions*".
- This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-4-.04, "*Control of Particulate Emissions in Process Industries – General*".
- The source permitted under this unit has enforceable limits in place in order to prevent it from being subject to the provisions of ADEM Admin. Code R. 335-3-14-.04, "*Air Permits Authorizing Construction in Clean Air Areas [Prevention of Significant Deterioration]*.
- This source is not subject to the applicable requirements of 40 CFR 64, "*Compliance Assurance Monitoring*". The cyclones used in this process exist for product recovery and separation and are essential to the process.

Emissions Standards:

- Opacity

  ***Chapter 4 Section .01*** states that no person shall discharge into the atmosphere from any source of emission, particulate of an opacity greater than that designated as twenty (20%) percent opacity, as determined by a six (6) minute average. During one six (6) minute period in any sixty (60) minute period, a person may discharge into the atmosphere from any source of emission, particulate of an opacity not greater than that designated as forty percent (40%) opacity ***(ADEM Admin Code R. 335-4-.01(1)(a)(b))***.

- Particulate

  This unit has the following enforceable limits in place to prevent it from being subject to the provisions of ***ADEM Admin. Code R. 335-3-14-.04***:

  1. 24 TPH New Peanut Shelling Plant shall not operate more than 4,500 hours during any consecutive twelve (12) month period.

  ***Chapter 4 Section .04*** limits particulate matter emissions from X040 to no more than 25.75 lbs/hr. This is calculated using the process weight equation for Class I counties, $E = 3.59P^{0.62}$. ***(ADEM Admin Code R. 335-4-.04(1))***. When operating at full capacity for the permitted number of hours (4,500 hr/yr), the allowable PM emissions in TPY is 57.9.

Compliance and Performance Test Methods and Procedures:

- If testing is required, particulate emissions from this process shall be measured in accordance with 40 CFR Part 60, Appendix A, Method 5.
- If testing is required, visible emissions from this process shall be measured in accordance with 40 CFR Part 60, Appendix A, Method 9.

Emission Monitoring:

- When operating, the emissions from the cyclones shall be visually observed a minimum of once daily to determine if observed visible emissions are greater than normal as determined by previous observations.
- Sessions shall conduct an inspection of the cyclones no less frequently than annually, but more often whenever visible emissions are observed.
- Whenever greater than normal visible emissions are observed, corrective action shall be taken within four (4) hours, followed by an additional observation to confirm that greater than normal visible emissions are no longer present.

Recordkeeping and Reporting Requirements:

- Records of the process operating hours, including monthly and twelve (12) month rolling totals, shall be kept in a permanent form suitable for inspection. These records shall be retained for a minimum of five (5) years and made available upon request.
- Records of the dates and times of cyclone visual observations, inspections, corrective actions taken, and maintenance performed shall be maintained in a logbook and made available for inspection. The records shall be retained for at least five (5) years from the date of generation.
- A semi-annual report shall be submitted to the Air Division within 60 days of the end of the six (6) month reporting period. This report shall contain the following:
  1. A statement certifying that the inspections were performed as required.
  2. Date and time any greater than normal visible emissions were observed.
  3. Records of any corrective action, maintenance, or inspections performed.

Expected Emissions:

Per air permit application forms submitted, the expected emissions from X040 are as follows:

| **Emission Point** | **Pollutant** | **Allowable Emissions[1]** | | **Uncontrolled Potential Emissions[2]** | | **Expected Emissions[3]** | |
|---|---|---|---|---|---|---|---|
| | | **(lb/hr)** | **(TPY)** | **(lb/hr)** | **(TPY)** | **(lb/hr)** | **(TPY)** |
| 006A | PM | 25.8 | 57.9 | 12.2 | 40.2 | 0.37 | 0.61 |

*[1] – Allowable hourly emissions based on process weight equation for Class I counties, $E = 3.59P^{0.62}$ (ADEM Admin Code R. 335-4-.04(1)). Yearly is allowable hourly multiplied by allowable hours of operation (4,500 hrs).*

*[2] – Potential emissions are calculated by multiplying the emissions factor of 0.51 lb/ton (AP-42 Table 9.10.2.1-1) by the feed rate (24TPH) and maximum allowable operating hours (6,570 hr/yr).*

*[3] – Expected emissions based on historical data of 3,320 hrs/yr * 24 ton/hr * 0.51 lb/ton * 1 ton/2000 lb * (1- step no. 1 inside cyclones efficiency of 90%) * (1- step no. 2 outside cyclones efficiency of 70%)*

Per air permit application forms submitted, the expected emissions from Z032 are as follows:

| Emission Point | Pollutant | Potential Emissions[1] | | Expected Emissions | |
|---|---|---|---|---|---|
| | | (lb/hr) | (TPY) | (lb/hr) | (TPY) |
| 006B | PM - FUG | 1.22 | 5.32 | 1.22 | 2.0 |

*[1] – Potential Emissions are calculated as follows: Feed Rate (4.5 TPH) * Emission Factor (0.27 lb/ton – AP-42 Table 9.11.1) * Maximum Hours of Operation (8,760 hr/yr)*

*[2] – Expected emissions are calculated as follows: Feed Rate (4.5 TPH) * Emission Factor (0.27 lb/ton – AP-42 Table 9.11.1) * Historical Hours of Operation (3,320 hr/yr)*

**12 TPH Farmer's Stock Peanut Seed Cleaner:**

12 TPH Farmer's Stock Peanut Seed Cleaner is comprised of the following emissions point:

| Emission Point | Description |
|---|---|
| 007 | 12 TPH Farmer's Stock Peanut Seed Cleaner with Three (3) Cyclones |

Applicability:

- This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, "*Major Source Operating Permits*".
- This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-4-.01(1), "*Visible Emissions*".
- This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-4-.04, "*Process Industries – General*".
- The source permitted under this unit has enforceable limits in place in order to prevent it from being subject to the provisions of ADEM Admin. Code R. 335-3-14-.04, "*Air Permits Authorizing Construction in Clean Air Areas [Prevention of Significant Deterioration]*.
- This source is not subject to the applicable requirements of 40 CFR 64, "*Compliance Assurance Monitoring*". The cyclones used in this process exist for product recovery and separation and are essential to the process.

Emissions Standards:

- Opacity

  ***Chapter 4 Section .01*** states that no person shall discharge into the atmosphere from any source of emission, particulate of an opacity greater than that designated as twenty (20%) percent opacity, as determined by a six (6) minute average. During one six (6) minute period in any sixty (60) minute period, a person may discharge into the atmosphere from any source of emission, particulate of an opacity not greater than that designated as forty percent (40%) opacity ***(ADEM Admin Code R. 335-4-.01(1)(a)(b))***.

- Particulate

  This unit has the following enforceable limits in place to prevent it from being subject to the provisions of ***ADEM Admin. Code R. 335-3-14-.04***:

  1. This unit shall not operate more than 700 hours during any consecutive twelve (12) month period.

  ***Chapter 4 Section .04*** limits particulate matter emissions from this unit to no more than 16.8 lbs/hr. This is calculated using the process weight equation for Class I counties, $E = 3.59P^{0.62}$. ***(ADEM Admin Code R. 335-4-.04(1))***. When operating at full capacity for the permitted number of hours (700 hr/yr), the allowable PM emissions in TPY is 5.86.

Compliance and Performance Test Methods and Procedures:

- If testing is required, particulate emissions from this process shall be measured in accordance with 40 CFR Part 60, Appendix A, Method 5.

- If testing is required, visible emissions from this process shall be measured in accordance with 40 CFR Part 60, Appendix A, Method 9.

Emission Monitoring:

- When operating, the emissions from the cyclones shall be visually observed a minimum of once daily to determine if observed visible emissions are greater than normal as determined by previous observations.
- Sessions shall conduct an inspection of the cyclones no less frequently than annually, but more often whenever visible emissions are observed.
- Whenever greater than normal visible emissions are observed, corrective action shall be taken within four (4) hours, followed by an additional observation to confirm that greater than normal visible emissions are no longer present.

Recordkeeping and Reporting Requirements:

- Records of the process operating hours, including monthly and twelve (12) month rolling totals, shall be kept in a permanent form suitable for inspection. These records shall be retained for a minimum of five (5) years and made available upon request.
- Records of the dates and times of cyclone visual observations, inspections, corrective actions taken, and maintenance performed shall be maintained in a logbook and made available for inspection. The records shall be retained for at least five (5) years from the date of generation.
- A semi-annual report shall be submitted to the Air Division within 60 days of the end of the six (6) month reporting period. This report shall contain the following:
  1. A statement certifying that the inspections were performed as required.
  2. Date and time any greater than normal visible emissions were observed.
  3. Records of any corrective action, maintenance, or inspections performed.

Expected Emissions:

Per air permit application forms submitted, the expected emissions from this unit are as follows:

| **Emission Point** | **Pollutant** | **Allowable Emissions[1]** | | **Uncontrolled Potential Emissions[2]** | | **Expected Emissions[3]** | |
|---|---|---|---|---|---|---|---|
| | | **(lb/hr)** | **(TPY)** | **(lb/hr)** | **(TPY)** | **(lb/hr)** | **(TPY)** |
| 007 | PM | 16.8 | 5.86 | 34.2 | 12.0 | Neg | Neg |

*[1] – Allowable hourly emissions based on process weight equation for Class I counties, $E = 3.59P^{0.62}$ (ADEM Admin Code R. 335-4-.04(1)). Yearly is allowable hourly multiplied by allowable hours of operation (700 hrs).*

*[2] – Potential emissions are calculated by multiplying the emissions factor of 2.85 lb/ton (AP-42 Table 9.10.2.1-1) by the feed rate (12 TPH) and maximum allowable operating hours (700 hr/yr).*

*[3] - This unit rarely operates. Historically, this unit has not operated at all in recent years.*

**25.1 MMBtu/hr Natural Gas and LPG Fired Cleaver Brooks Boiler:**

This unit was formerly referred to as Unit 008:

| Emission Point | Description |
|---|---|
| 008 | 25.1 MMBtu/hr Natural Gas and LPG Fired Cleaver Brooks Boiler (Oil Mill) |

Applicability:

- This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16.03, "*Major Source Operating Permits*".
- This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-4-.01(1), "*Visible Emissions*".
- This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-4-.03(1), "*Control of Particulate Emissions - Fuel Burning Equipment*".
- This source is not subject to the applicable requirements of 40 CFR 60 Subpart $D_c$, "*Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units* ". This boiler was constructed in 1975.
- This boiler is subject to the applicable requirements of 40 CFR 63 Subpart DDDDD, "*National Emissions Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters*". However, this subpart was vacated on June 8, 2007. Requirements from this subpart will not be included in the permit.
- This source is not subject to the applicable requirements of 40 CFR 64, "*Compliance Assurance Monitoring*". There are no pollution control devices on this unit.

Emissions Standards:

- Opacity

  ***Chapter 4 Section .01*** states that no person shall discharge into the atmosphere from any source of emission, particulate of an opacity greater than that designated as twenty (20%) percent opacity, as determined by a six (6) minute average. During one six (6) minute period in any sixty (60) minute period, a person may discharge into the atmosphere from any source of emission, particulate of an opacity not greater than that designated as forty percent (40%) opacity ***(ADEM Admin Code R. 335-3-4-.01(1)(a)(b))***.

- Particulate

  ***Chapter 4 Section .03*** limits particulate matter emissions from this source to no more than 0.334 lb/MMBtu, or 8.39 lbs/hr (36.7 TPY). This is calculated using the fuel burning equipment equation for Class I counties, $E = 1.38H^{-0.44}$. ***(ADEM Admin Code R. 335-3-4-.03(1))***.

- Sulfur dioxide:

  This boiler is permitted to burn only natural gas and/or propane (LPG).

Compliance and Performance Test Methods and Procedures:

- If testing is required, particulate emissions from this process shall be measured in accordance with 40 CFR Part 60, Appendix A, Method 5.

- If testing is required, $SO_2$ emissions from this process shall be measured in accordance with 40 CFR Part 60, Appendix A, Method 6.
- If testing is required, visible emissions from this process shall be measured in accordance with 40 CFR Part 60, Appendix A, Method 9.

Emission Monitoring:

- Records of fuel usage shall be kept in a permanent form suitable for inspection for a period of five (5) years from the date of generation in order to demonstrate that only natural gas and/or propane gas (LPG) was burned in this boiler.

Recordkeeping and Reporting Requirements:

- A semi-annual report shall be submitted to the Air Division within 60 days of the end of the six (6) month reporting period. The semi-annual report shall include a statement certifying that only natural gas and/or propane (LPG) gas was burned in the boiler during the reporting period.

Expected Emissions:

Per air permit application forms submitted, the expected emissions from this unit are as follows:

| **Emission Point** | **Pollutant** | **Allowable Emissions[1]** | | **Uncontrolled Potential Emissions[2]** | | **Expected Emissions[3]** | |
|---|---|---|---|---|---|---|---|
| | | **(lb/hr)** | **(TPY)** | **(lb/hr)** | **(TPY)** | **(lb/hr)** | **(TPY)** |
| 008 | PM | 8.39 | 36.7 | 0.18 | 0.80 | 0.071 | 0.22 |
| | $SO_2$ | 0.41 | 1.80 | 0.41 | 1.80 | 0.18 | 0.29 |
| | $NO_x$ | N/A | N/A | 5.21 | 22.8 | 2.24 | 5.03 |
| | CO | N/A | N/A | 2.01 | 8.80 | 0.74 | 1.80 |
| | VOC | N/A | N/A | 0.14 | 0.60 | 0.059 | 0.17 |

*[1] –The only pollutants with an allowable emissions limit is PM which is calculated using the fuel burning equipment equation in ADEM Admin Code R. 335-4-.03(1), $E(lb/MMBtu) = 1.38H^{-0.44}$. $SO_2$ is equal to the potential uncontrolled emissions since the unit is allowed to burn only NG and LPG.*

*[2] – Potential emissions are determined using fuel emissions factors and using the highest possible emissions from these calculations based on 8,760 hours of operation.*

*[3] - Actual emissions are determined using emissions factors assuming natural gas as a primary fuel and LPG as backup fuel.*

**Peanut Oil Extraction Process:**

This unit was formerly known as Unit 009:

| Emission Point | Description |
|---|---|
| 009 | Peanut Oil Extraction Process with 20,000 gallon Hexane Solvent Storage Tank with Mineral Oil Absorption System |

Applicability:

- This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, "*Major Source Operating Permits*".
- This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-4-.01(1), "*Visible Emissions*".
- This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-4-.04(1), "*Process Industries – General*".
- This source has enforceable limits in place in order to prevent it from being subject to the provisions of ADEM Admin. Code R. 335-3-14-.04, "*Air Permits Authorizing Construction in Clean Air Areas [Prevention of Significant Deterioration]*.
- The 20,000 gallon Hexane Solvent Storage Tank is not subject to the applicable requirements of 40 CFR 60 Subpart $K_b$, "*Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984*". Per §60.110b(d)(8), vessels subject to 40 CFR 63 Subpart GGGG, "*National Emissions Standards for Hazardous Air Pollutants for Solvent Extraction for Vegetable Oil Production*" are not subject to the applicable requirements of 40 CFR 60 Subpart $K_b$.
- This source is subject to the applicable requirements of 40 CFR 63 Subpart GGGG, "*National Emissions Standards for Hazardous Air Pollutants for Solvent Extraction for Vegetable Oil Production*".
- This unit is not subject to 40 CFR 64, "*Compliance Assurance Monitoring*". The mineral oil absorption system is not considered to be a pollution control device because it is an integral process component.

Emissions Standards:

- Opacity

  This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-4-.01(1), "*Visible Emissions*", which states that no person shall discharge into the atmosphere from any source of emission, particulate of an opacity greater than that designated as twenty (20%) percent opacity, as determined by a six (6) minute average. During one six (6) minute period in any sixty (60) minute period, a person may discharge into the atmosphere from any source of emission, particulate of an opacity not greater than that designated as forty percent (40%) opacity.

- Particulate

  ***Chapter 4 Section .04*** limits particulate matter emissions from this source to no more than 0.57 lb/hr (2.50 TPY). This is calculated using the process weight equation for Class I counties, $E = 3.59P^{0.62}$. ***(ADEM Admin Code R. 335-4-.04(1))***.

- Volatile Organic Compounds

  This process shall not use more than 87,500 gallons (245 TPY) of hexane solvent during any consecutive twelve (12) month period.

- Hazardous Air Pollutants

  This source is subject to the applicable requirements of 40 CFR 63 Subpart GGGG, "*National Emissions Standards for Hazardous Air Pollutants for Solvent Extraction for Vegetable Oil Production*". Therefore, the following standards apply to this unit:

  This facility shall maintain a compliance ratio of less than or equal to 1.00 of actual solvent loss to allowable solvent loss. The allowable solvent loss is a function of the oilseed processed and the solvent loss factor (SLF) for this facility.

Compliance and Performance Test Methods and Procedures:

- If testing is required, particulate emissions from this process shall be measured in accordance with 40 CFR Part 60, Appendix A, Method 5.
- If testing is required, visible emissions from this process shall be measured in accordance with 40 CFR Part 60, Appendix A, Method 9.
- Per §63.2850(a)(6), should performance testing be required, volatile organic compound emissions from this process shall be measured in accordance with 40 CFR Part 63.7.
- The facility shall keep a copy of the compliance plan and the startup, shutdown, and malfunction (SSM) plan on-site and readily available as long as the source is operational. These plans shall provide detailed procedures for operating and maintaining this source to minimize emissions, and must specify a program of corrective action for malfunctioning process and air pollution control equipment and reflect the best practices now in use by the industry to minimize emissions.
- The solvent loss factor (SLF) for this facility, as determined by Table 1 of §63.2840, shall be 1.2 gallons of solvent lost per ton of oilseed processed for peanut processing at an existing source.
- The compliance ratio shall be calculated using either of the following equations:

$$\text{Compliance Ratio} = \frac{\text{Actual Hap Loss}}{\text{Allowable Hap Loss}}$$

or

$$\text{Compliance Ratio} = \frac{f * \text{Actual Solvent Loss}}{0.64 * \sum_{i=1}^{n} \left( (\text{Oilseed})_i * (\text{SLF})_i \right)}$$

Where:
f = The weighted average volume fraction of HAP in solvent received during the previous 12 operating months.
0.64 = The average volume fraction of HAP in solvent in the baseline performance data
Actual Solvent Loss = Gallons of actual solvent loss during previous 12 operating months
Oilseed = Tons of each oilseed type ''i'' processed during the previous 12 operating months
SLF = The corresponding solvent loss factor (gal/ton) for oilseed

- The following equation shall be used to determine the actual solvent loss occurring from the affected source for all normal operating periods recorded within a calendar month:

$$\text{Monthly Actual Solvent (gal)} = \sum_{i=1}^{n} \left(SOLV_B - SOLV_E + SOLV_R \pm SOLV_A\right)_i$$

Where:
$SOLV_B$ = Gallons of solvent in the inventory at the beginning of normal operating period ''i'' $SOLV_E$ = Gallons of solvent in the inventory at the end of normal operating period ''i''
$SOLV_R$ = Gallons of solvent received between the beginning and ending inventory dates of normal operating period ''i''
$SOLV_A$ = Gallons of solvent added or removed from the extraction solvent inventory during normal operating period ''i''
n = Number of normal operating periods in a calendar month.

- The monthly weighted average volume fraction of HAP shall be calculated using the following equation:

$$\text{Monthly Weighted Average HAP Content of Extraction Solvent (volume fraction)} = \frac{\sum_{i=1}^{n} \left(\text{Received}_i * \text{Content}_i\right)}{\text{Total Received}}$$

Where:
$\text{Received}_i$ = Gallons of extraction solvent received in delivery ''i.''
$\text{Content}_i$ = The volume fraction of HAP in extraction solvent delivery ''i.''
Total Received = Total gallons of extraction solvent received since the end of the previous operating month.
n = Number of extraction solvent deliveries since the end of the previous operating month.

- The twelve-month weighted average volume fraction of HAP shall be calculated using the following equation:

$$\text{12-Month Weighted Average of HAP Content in Solvent Received (volume fraction)} = \frac{\sum_{i=1}^{12} \left(\text{Received}_i * \text{Content}_i\right)}{\text{Total Received}}$$

$\text{Received}_i$ = Gallons of extraction solvent received in operating month ''i''
$\text{Content}_i$ = Average volume fraction of HAP in extraction solvent received in operating month ''i''
Total Received = Total gallons of extraction solvent received during the previous 12 operating months.

- Monthly oilseed processed shall be determined using the following equation:

$$\text{Monthly Quantity of Each Oilseed Processed (tons)} = \sum_{n=1}^{n} \left(SEED_B - SEED_E + SEED_R \pm SEED_A\right)$$

Where:
SEEDB = Tons of oilseed in the inventory at the beginning of normal operating period ''i''
SEEDE = Tons of oilseed in the inventory at the end of normal operating period ''i''
SEEDR = Tons of oilseed received during normal operating period ''i''
SEEDA = Tons of oilseed added or removed from the oilseed inventory during normal operating period ''i''
n = Number of normal operating periods

- The twelve-month actual solvent loss shall be the sum of each monthly actual solvent loss for the previous twelve month period.
- The twelve-month volume of peanuts processed shall be the sum of the monthly volumes of peanuts process for the previous twelve month period.
- The volume fraction of n-Hexane in the solvent shall be obtained from the manufacturer's Material Safety Data Sheet (MSDS) or a manufacturer's certificate of analysis.

Emission Monitoring:

- When operating, the emission from the cyclones shall be visually observed a minimum of once daily to determine if visible emissions are greater than normal, as determined by previous observations.
- Sessions shall conduct an inspection of the cyclones no less frequently than annually, but more often whenever the observed visible emissions are greater than normal.
- Whenever observed visible emissions are greater than normal, corrective actions shall be taken within four (4) hours, followed by an additional observation to confirm that emissions are reduced to normal.
- By the end of each calendar month, the monthly total solvent loss in gallons and the compliance ratio shall be determined for the previous operating month.

Recordkeeping and Reporting Requirements:

- Records of the dates and times of cyclone visual observations, inspections, corrective actions taken, and maintenance performed shall be maintained in a logbook and made available for inspection. The records shall be retained for at least five (5) years from the date of generation.
- A semi-annual report shall be submitted to the Air Division within 60 days of the end of the six (6) month reporting period. These semi-annual reports shall include the following information:
  1. A statement certifying that the inspections were performed as required.
  2. Date and time any greater than normal visible emissions were observed.
  3. Records of any corrective action, maintenance, or inspections performed.
- The compliance demonstration plan and SSM plan shall be kept on-site in a permanent form suitable for inspection and made available upon request. These reports shall be kept for the life of the facility.
- Monthly and twelve (12) month rolling totals of hexane solvent usage shall be kept in a permanent form suitable for inspection and made available upon request. These records shall be kept for a period of five (5) years from the date of generation.
- Records of the monthly and twelve (12) month rolling total of actual solvent loss shall be kept in a permanent form suitable for inspection and made available upon request. These records shall be maintained for a period of five (5) years from the date of generation.
- Records of the monthly and twelve (12) month rolling totals (in tons) of oilseed processed shall be kept in a permanent form suitable for inspection and made available upon request. These records shall be maintained for a period of five (5) years from the date of generation.
- Records of the monthly and twelve (12) month compliance ratios shall be kept in a permanent form suitable for inspection and made available upon request. These records shall be maintained for a period of five (5) years from the date of generation.
- Records of the volume fraction of each HAP in each delivery of extraction solvent shall be kept in a permanent form suitable for inspection and made available upon request. These records shall be maintained for a period of five (5) years from the date of generation.

- Records of the total gallons of extraction solvent received in each delivery shall be kept in a permanent form suitable for inspection and made available upon request. These records shall be maintained for a period of five (5) years from the date of generation.
- Records of the monthly weighted average volume fraction of HAP in the extraction solvent for the previous twelve (12) months shall be kept in a permanent form suitable for inspection and made available upon request. These records shall be maintained for a period of five (5) years from the date of generation.
- Manufacturer supplied certificates of analysis or Material Safety Data Sheets (MSDS) for the hexane solvent shall be kept in a permanent form suitable for inspection for a period of five (5) years from the date of generation and shall be made available upon request.
- A Notification of Compliance Status report must be submitted to the Department no later then 60 days after determining your initial 12 operating months compliance ratio. The notification of compliance status report must contain the following items:
  1. The name and address of the owner or operator.
  2. The physical address of the vegetable oil production process.
  3. Each listed oilseed type processed during the previous 12 operating months.
  4. Each HAP present in concentrations greater than 1 percent by volume in each delivery of solvent received during the 12 operating months period used for the initial compliance determination.
  5. A statement designating the source as a major source of HAP or a demonstration that the source qualifies as an area source.
  6. A compliance certification indicating whether the source complied with all of the requirements of this subpart throughout the 12 operating months used for the initial source compliance determination.
  7. Certification that the plan for demonstrating compliance and SSM plan are complete and available on-site for inspection.
  8. Certification that the facility is following the procedures described in the plan for demonstrating compliance.
  9. Certification that the compliance ratio is less than or equal to 1.00.
- An annual MACT compliance certification is due at the Department 12 calendar months after submitting the notification of compliance status. Each subsequent annual MACT compliance certification is due 12 calendar months after the previous annual compliance certification. The annual MACT compliance certification provides the compliance status for each operating month during the 12 calendar months period ending 60 days prior to the date on which the report is due. This report shall include the following:
  1. The name and address of the owner or operator.
  2. The physical address of the vegetable oil production process.
  3. Each listed oilseed type processed during the 12 calendar months period covered by the report.
  4. Each HAP present in concentrations greater than 1 percent by volume in each delivery of solvent received during the 12 calendar months period covered by the report.
  5. A statement designating the source as a major source of HAP or a demonstration that the source qualifies as an area source.
  6. A compliance certification to indicate whether the source was in compliance for each compliance determination made during the 12 calendar months period covered by the report.
  7. Certification that the facility is following the procedures described in the plan for demonstrating compliance.
  8. Certification that the compliance ratio is less than or equal to 1.00.
- A deviation notification report shall be submitted to the Department for each instance that the calculated compliance ratio exceeds 1.00. This report shall be received by the Department by no later than the last day of the month following the calendar month in which the deviation occurred.

- A semi-annual SSM report stating that actions were taken that were consistent with the procedures in the SSM plan. The report shall be submitted to the Department by no later than the 30th day following the end of the six month reporting period. This report shall include the following information:
    1. Instances in which actions were taken that were not consistent with the SSM plan, but the source did not exceed any applicable emission limit.
    2. The number, duration, and a brief description of each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limit to be exceeded.
    3. A statement containing the name, title, and signature of the owner or operator or other responsible official certifying that the information contained in the report is true, accurate, and complete.

Emissions:

Per air permit application forms submitted, the expected emissions from this unit are as follows:

| **Emission Point** | **Pollutant** | **Allowable Emissions[1]** | | **Uncontrolled Potential Emissions[2]** | | **Expected Emissions[3]** | |
|---|---|---|---|---|---|---|---|
| | | **(lb/hr)** | **(TPY)** | **(lb/hr)** | **(TPY)** | **(lb/hr)** | **(TPY)** |
| 009 | VOC/HAP | 55.9 | 245 | 55.9 | 245 | 52.7 | 231 |
| | PM | 0.57 | 2.50 | 0.57 | 2.48 | 0.57 | 1.82 |

*[1] – Allowable hourly VOC/HAP emissions are based on the permit limit of 87,500 gallons of hexane solvent per twelve month period (55.9 lb/hr or 245 TPY . PM emissions are based on process weight equation for Class I counties, $E = 3.59P^{0.62}$ (ADEM Admin Code R. 335-4-.04(1)). Yearly is allowable hourly multiplied by allowable hours of operation (8,760 hrs).*

*[2] – Potential PM emissions are calculated using 8,760 hours of operation, 0.02 gr/dscf (AWMA Air Pollution Engineering Manual, Table 4, p.257), historical operating hours (6,429 hr/yr), and exhaust flow rate of unit. Potential VOC/HAP emissions are the maximum allowable emissions..*

*[3] - Expected HAP/VOC emissions are based on historical operating data of 6,429 hr/yr and the hexane solvent limit. The expected PM emissions are calculated as the potential hourly emissions multiplied by the historical hours of operation, 6,429 hr/yr.*

**20 TPH Hopper Car Meal Loadout:**

This unit was formerly known as Unit 008:

| Emission Point | Description |
|---|---|
| 010 | 20 TPH Hopper Car Meal Loadout with Hood and Cyclone and Totally Enclosed Truck Meal Loadout (Oil Mill) |

Applicability:

- This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, "*Major Source Operating Permits*".
- This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-4-.01(1), "*Visible Emissions*".
- This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-4-.04, "*Process Industries – General*".
- The source permitted under this unit has enforceable limits in place in order to prevent it from being subject to the provisions of ADEM Admin. Code R. 335-3-14-.04, "*Air Permits Authorizing Construction in Clean Air Areas [Prevention of Significant Deterioration]*.
- This source is not subject to the applicable requirements of 40 CFR 64, "*Compliance Assurance Monitoring*". The uncontrolled PM emissions are 27.9 TPY, which is well below the 100 TPY threshold.

Emissions Standards:

- Opacity

  ***Chapter 4 Section .01*** states that no person shall discharge into the atmosphere from any source of emission, particulate of an opacity greater than that designated as twenty (20%) percent opacity, as determined by a six (6) minute average. During one six (6) minute period in any sixty (60) minute period, a person may discharge into the atmosphere from any source of emission, particulate of an opacity not greater than that designated as forty percent (40%) opacity ***(ADEM Admin Code R. 335-4-.01(1)(a)(b))***.

- Particulate

  This unit has the following enforceable limits in place to prevent it from being subject to the provisions of ***ADEM Admin. Code R. 335-3-14-.04***:

  1. This unit shall not operate more than 3,732 hours during any consecutive twelve (12) month period.

  2. Emissions from this unit are limited to no more than 2.70 lb/hr (5.0) TPY. The limit was derived was derived using the following equation:

*PM Emissions (TPY) = Proposed Feed Rate[1] (TPH) * Emission Factor[2] (lb/ton) * (1 – Cyclone Control Efficiency)[3] * Allowable Operating Schedule[4] (hr/yr) * Safety Factor[5]*

[1] *Maximum feed rate for this unit = 20 TPH*
[2] *AP-42 Section 9.11.1, Table 9.11.1-1 factor of 0.27 lb/ton for meal loadout at soybean mills (since peanut loadout numbers are unavailable).*
[3] *Ninety (90%) percent cyclone control efficiency used*
[4] *Allowable 12-month total of 3,732 hr/yr*
[5] *Safety Factor of 5 used*

Compliance and Performance Test Methods and Procedures:

- If testing is required, particulate emissions from this process shall be measured in accordance with 40 CFR Part 60, Appendix A, Method 5.
- If testing is required, visible emissions from this process shall be measured in accordance with 40 CFR Part 60, Appendix A, Method 9.

Emission Monitoring:

- When operating, the emissions from the cyclones shall be visually observed a minimum of once daily to determine if observed visible emissions are greater than normal as determined by previous observations.
- Sessions shall conduct an inspection of the cyclones no less frequently than annually, but more often whenever visible emissions are observed.
- Whenever greater than normal visible emissions are observed, corrective action shall be taken within four (4) hours, followed by an additional observation to confirm that greater than normal visible emissions are no longer present.

Recordkeeping and Reporting Requirements:

- Records of the process operating hours, including monthly and twelve (12) month rolling totals, shall be kept in a permanent form suitable for inspection. These records shall be retained for a minimum of five (5) years and made available upon request.
- Records of the dates and times of cyclone visual observations, inspections, corrective actions taken, and maintenance performed shall be maintained in a logbook and made available for inspection. The records shall be retained for at least five (5) years from the date of generation.
- A semi-annual report shall be submitted to the Air Division within 60 days of the end of the six (6) month reporting period. This report shall contain the following:
  1. A statement certifying that the inspections were performed as required.
  2. Date and time any greater than normal visible emissions were observed.
  3. Records of any corrective action, maintenance, or inspections performed.

Emissions:

Current emissions from this unit are as follows:

| Emission Point | Pollutant | Allowable Emissions[1] | | Uncontrolled Potential Emissions[2] | | Controlled Potential Emissions[2] | | Expected Emissions[4] | |
|---|---|---|---|---|---|---|---|---|---|
| | | (lb/hr) | (TPY) | (lb/hr) | (TPY) | (lb/hr) | (TPY) | (lb/hr) | (TPY) |
| 010 | PM | 2.70 | 5.03 | 5.40 | 10.0 | 0.54 | 1.00 | 0.54 | 0.86 |

[1] – *Allowable emissions are the product of the proposed emission limit (2.70 lb/hr) and allowable hourly operating limit (3,732 hrs).*

[2] – *Uncontrolled potential emissions are calculated by multiplying the emissions factor of 0.27 lb/ton (AP-42 Table 9.11.1-1) by the proposed increased feed rate (20 TPH) and maximum allowable operating hours (3,732 hr/yr).*

[3] – *Controlled emissions are the product of uncontrolled emissions and (1-cyclone efficiency of 90%).*

[4] – *Expected emissions based on historical data of 3,209 hrs/yr multiplied by controlled lb/hr factor.*